

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) A device for determining ~~the quality~~ qualities of reagents used in an assay, comprising:
 - a) a plurality of quality control compounds, wherein each of said compound control compounds is reactive with ~~a different reagent~~ one of said reagents used in said assay; and
 - b) a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds.
2. (Original) The device of claim 1, wherein said substrate comprises a solid substrate.
3. (Currently Amended) The device of claim [[1]] 2, wherein said solid substrate comprises plastic, glass, quartz, or silicon.
4. (Original) The device of claim 3, wherein said glass comprises a microscope slide.
5. (Original) The device of claim 1, wherein said different amount is a serial dilution series of said control compound.
6. (Currently Amended) The device of claim 1, wherein at least one of said quality control compounds consists essentially of a compound reactive with ~~said reagent~~ one of said reagents, where in ~~said reagent~~ wherein one of said reagents is a secondary reagent.
7. (Original) The device of claim 1, wherein said plurality of quality control compounds comprise at least one ligand, wherein ~~at least one of said reagents~~ one of said reagents is a binding partner of said ligand.

8. (Original) The device of claim 7, wherein said ligand comprises a hapten.
9. (Original) The device of claim 7, wherein said ligand comprises biotin.
10. (Currently Amended) The device of claim 7, wherein said ligand comprises an epitope bound by a reagent an antibody.
11. (Original) The device of claim 10, wherein said antibody comprises a non-primary antibody.
12. (Original) The device of claim 10, wherein said epitope comprises a protein.
13. (Currently Amended) The device of claim 12, wherein said protein comprises a serum protein.
14. (Currently Amended) The device of claim 13, wherein said serum protein is a serum protein of one species selected from the group consisting of serum protein from bovine, cat, chicken, dog, donkey, goat, guinea pig, hamster, horse, human, mouse, rabbit, rat, sheep, and swine.
15. (Original) The device of claim 12, wherein said protein is selected from the group consisting of immunoglobulin isotypes IgG, IgM, IgA, and IgE.
16. (Original) The device of claim 1, wherein at least one of said quality control compounds comprise at least one detection enzyme.
17. (Original) The device of claim 16, wherein said detection enzyme is selected from the group consisting of β -galactosidase, horseradish peroxidase, alkaline phosphatase, glucose oxidase, β -glucuronidase, urease, glucose-6-phosphate dehydrogenase, and lactate dehydrogenase.

18. (Currently Amended) The device of claim 1, wherein said control compounds comprise[[s]] a histochemical stain control compound.

19. (Currently Amended) The device of claim 18, wherein said histochemical stain control compound reacts with a dye selected from the group consisting of hematoxylin, methyl green, methylene blue, pyronine, and toluidine blue, acid fuchsine, aniline blue, eosin, and orange G.

20. (Original) The device of claim 1, wherein said device contains an identifying code.

21. (Original) The device of claim 1, wherein said plurality of quality control compounds comprise serum proteins, ligands, haptens, and detection enzymes.

22. (Original) The device of claim 1, wherein said assay comprises an immuno-based assay.

23. (Original) The device of claim 1, wherein said assay comprises an immunohistochemical assay.

24. (Original) The device of claim 1, wherein said assay comprises an hybridization assay.

25. (Currently Amended) A method of determining ~~the quality qualities~~ of reagents used in an assay process, comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds;

~~a) b) contacting a plurality of different said reagents with [a]] said substrate comprising a plurality of quality control compounds, wherein each said control compound is reactive with at least one of said reagents used in said assay, wherein said control~~

~~compound is bound to said substrate on a plurality of spatially defined sites, each said defined site containing a different amount of said control compound; and~~

b) c) ~~assessing the an extent of reaction of at least one of said reagents with one of said compounds control compounds on said plurality of spatially defined sites on said substrate.~~

26. (Original) The method of claim 25, wherein said substrate comprises a solid substrate.

27. (Original) The method of claim 25, wherein said substrate is plastic, glass, quartz, or silicon.

28. (Currently Amended) The method of claim [[25]] 26, wherein said solid substrate comprises a microscope slide.

29. (Original) The method of claim 25, wherein said different amount is a serial dilution series of said compound.

30. (Currently Amended) The method of claim 25, wherein at least one of said quality control compounds consists essentially of a compound reactive with one of said reagents, ~~wherein said reagent wherein said one of said reagents~~ is a secondary reagent.

31. (Currently Amended) The method of claim 25, wherein said plurality of quality control compounds comprise at least one ligand and ~~said reagent~~ one of said reagents comprises a binding partner of said ligand.

32. (Currently Amended) The method of claim 31, wherein ~~said reagent~~ one of said reagents comprises an antibody and said ligand comprises an epitope bound by said antibody.

33. (Original) The method of claim 32, wherein said epitope comprises serum protein bound by said antibody.

34. (Currently Amended) The method of claim 31, wherein said ligand comprises biotin and said reagent one of said reagents comprises avidin.

35. (Currently Amended) The method of claim 25, wherein said plurality of quality control compounds comprise at least one detection enzyme and said reagent one of said reagents comprises a substrate for of said enzyme.

36. (Original) The method of claim 25, wherein said plurality of quality control compounds comprise at least one histochemical stain control compound.

37. (Original) The method of claim 25, wherein said assessing is by measuring a detectable signal.

38. (Currently Amended) The method of claim 25, wherein said assay process comprises an immune-based assay.

39. (Original) The method of claim 25, wherein said assay comprises an immunohistochemical assay.

40. (Currently Amended) The method of assessing the performance of an assay, said method comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds; providing a substrate comprising a plurality of quality control compounds, wherein each said control compound is reactive with a different reagent used in an assay process used to detect an analyte, wherein said compound is bound to said substrate on a plurality of spatially defined sites, each said defined site containing a different amount of said quality control compound;

b) performing at least one step of said assay on said substrate, wherein said

substrate is contacted with at least one of said reagents; and

c) assessing the a reaction of at least one of said quality control compounds and said reagent one of said reagents.

41. (Original) The method of claim 40, wherein said assay is performed simultaneously on said device and a biological sample being assayed.

42. (Currently amended) The method of claim 40, wherein first and second assays are performed and said method further comprises comparing said reaction in said first and second assay assays, whereby the performances of said first and second assay assays are determined.

43. (Currently Amended) A method of assessing the quality qualities of reagents used in an assay, said method comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds; providing a substrate comprising a plurality of quality control compounds, wherein each said compound is reactive with a different reagent used in said assay, wherein said compound is bound to said substrate on a plurality of spatially defined sites, each said defined site containing a different amount of said quality control compound;

b) performing said assay on a first said substrate device with a first set of assay said reagents comprising control reagents;

d) performing said assay on a second said substrate device with a second set of assay said reagents comprising test reagents; and

c) detecting the reactions of said control reagents and said test reagents.

44. (Currently Amended) The method of claim 43, further comprising step d) comparing said reactions of said control reagents and said test reagents.

45. (Currently Amended) The method of claim 44, wherein said control reagents and said test reagents comprise[[s]] assay said reagents stored for different time periods.

46. (Currently amended) The method of claim 44, wherein said control reagents and said test reagents comprise different preparations of said assay-reagents.